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ABSTRACT

According to an employee withdrawal model suggested by Miller and Rosse (1982), workers engage in a variety of integrated behaviors that are intended to place physical and psychological distance between themselves and a noxious work environment. To investigate the relationship of job satisfaction and employee withdrawal behaviors, 48 newly hired, predominantly female (83 percent), full-time hospital employees, with a mean age of 26, were interviewed ten times over a 6-month period about job attitudes, adaptive behavior, and personal health. Job attitudes were measured by the Faces-Format Measure of Overall Satisfaction with Work, the Job Descriptive Index Scales, the Index of Organizational Reactions, and the Work Alienation Scale. Adaptive behavior was assessed through biweekly supervisor records of lateness, absence, and turnover, and subjects' completion of the Avoidance Scale and the Attempts at Change Scale. Physical and mental health were assessed by a self-report checklist. A corresponding control group (N=24) completed only the job attitude scales. An analysis of the results showed that intention to quit, turnover, absence, attempts to change the job, and health disorders were negatively correlated with job satisfaction. Lateness and the self-report Avoidance Scale did not correlate with job satisfaction. Use of adaptive behaviors was found to have remedial effects for employee health. (BL)

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Working Paper 82-19

ADAPTATION TO WORK:
AN ANALYSIS OF EMPLOYEE HEALTH,
WITHDRAWAL AND CHANGE

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Running head: Adaptation to Work

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Abstract

Miller and Rosse have proposed a model of employee adaptation that posits withdrawal behaviors and attempts to change working conditions as alternative forms of adaptation to a dissatisfying work environment. Negative health outcomes are also hypothesized consequences of dissatisfaction with work. In this longitudinal study of new hospital employees, intention to quit, turnover, absence, attempts to change the job, and health disorders were negatively correlated with job satisfaction; lateness and a self-report Avoidance scale were not. Use of adaptive behaviors was also found to have remedial effects for employee health. Implications for a general model of adaptation are discussed.

Adaptation to Work:

An Analysis of Employee Health, Withdrawal and Change

Employee non-attendance continues to be a prominent area of organizational concern and study. Research proliferates on the correlates of absence and turnover, yet there is serious reason to question whether substantial progress towards understanding these behaviors is being made (cf. Mobley, 1982). One could argue that a major limitation of much current research in this area is a narrow focus on behaviors without asking whether these behaviors may represent specific manifestations of a more general underlying construct. Thus, in addition to the frequent study of turnover and absence, various researchers have studied the incidence among workers of lateness, crime, health disorders, sabotage, drug use, productivity-restricting social norms, and accidents. Only rarely have researchers considered the possibility that these behaviors may all reflect a single underlying dimension of response to the work situation.

A few authors have suggested models of employee withdrawal behaviors as an alternative conceptualization (Herzberg, Mausner, Peterson & Capwell, 1957; Gupta & Jenkins, 1980; Lyons, 1972). According to this perspective, workers may engage in a variety of behaviors that are intended to place physical or psychological distance between themselves and a noxious work environment. Affective responses to work serve as the central causal variable in explaining a variety of employee behaviors.

The implications of this approach are substantial. If withdrawal behaviors share common roots and are correlated among themselves (and

particularly if they are to some extent substitutable), further development of behavior-specific models is unlikely to be a fruitful approach. As an example, it is generally accepted that absence and turnover are both inversely associated with job satisfaction. If it can be shown that absence and turnover are alternative or sequentially-ordered responses to dissatisfying work, an integrated theory encompassing both variables should be more useful than separate models of each.

Despite the general failure of researchers to simultaneously study multiple dependent variables, there is piecemeal evidence in support of the withdrawal behavior hypothesis. Nearly all research using an individual level of analysis has shown a positive correlation between turnover and absence (e.g., Beehr & Gupta, 1978; Burke & Wilcox, 1972; Farrell & Robb, Note 1; Hill & Trist, 1955; Lyons, 1967, 1972; Melbin, 1961; Newman, 1974; Revans, 1964; Ronan, 1963; VanZelst & Kerr, 1953; Waters & Roach, 1979); only Marsh and Minnari (1977) and Miller (Note 2) report non-significant relations. The evidence of positive associations between absence and lateness is also strong (Adler & Golan, 1981; Beehr & Gupta, 1978; Chadwick-Jones, Brown, Nicholson & Sheppard, 1971; Farrell & Robb, Note 1), while the scarce data pertaining to lateness-turnover relations seems to suggest a weak but positive association (Beehr & Gupta, 1978; Farrell & Robb, Note 1). Evidence of covariance between the traditional triad of lateness, absence and turnover and other potential forms of withdrawal (e.g., escapist drug use, loafing, leaving work early, accidents, taking long breaks) is largely lacking, although Jenkins & Gupta (Note 3) have described a framework that outlines probable relations.

There is also evidence that job attitudes underlie the spectrum of withdrawal behaviors, despite the conclusions to the contrary made by Porter and Steers (1973) for absence and turnover. Overall job satisfaction shows consistent negative relations with turnover (Marsh & Minnari, 1977; Miller, Note 2; Miller, Katerberg & Hulin, 1979; Mobley, Horner & Hollingsworth, 1978; Newman, 1974; Waters & Roach, 1971, 1973, 1979) and, to a lesser extent, absence (Geise & Ruter, 1979; Newman, 1974; Nicholson, Brown & Chadwick-Jones, 1977; Talacchi, 1960; Waters & Roach, 1971, 1973, 1979; non-significant relations were reported by Ilgen and Hollenbach, 1977, and Miller, Note 2). In two studies of lateness, one showed a significant negative relation with global satisfaction (Adler & Golan, 1981), while the other reported non-significant results (Farrell & Robb, Note 1). (For a review of studies pertaining to relations with job satisfaction facets, as well as other correlates of lateness, absence and turnover see Miller and Rosse, Note 4.)

Common sense and anecdotal reports imply that dissatisfaction plays a role in a wider variety of behaviors than lateness, absence and turnover, but empirical evidence is scarce. One reason for this scarcity is that other withdrawal behaviors are difficult to study, due to their rarity, subtlety and frequently non-public nature; moreover, political considerations often result in organizational reluctance to report their incidence (e.g., frequency of goldbricking or sabotage). Even when their incidence is studied, affective correlates are often not simultaneously considered. Thus empirical evidence is largely limited to inverse associations between job satisfaction and organizational use of alcohol/drugs (Cook, Walizer & Mace, 1976; Hawthorne, 1977-1978; Mangione & Quinn,

1975; Perone, DeWaard & Baron, 1979; Trice & Roman, 1972; Urban, 1973). Miller and Rosse (Note 4) provide a more complete description of the empirical and theoretical literature linking job attitudes and withdrawal behaviors.

Although the withdrawal concept offers some advantages over the traditional approach of studying behaviors from a univariate perspective, it too suffers from a limited point of view. According to its proponents, workers exhibit withdrawal behaviors as a means of avoiding a noxious work environment. In other words, the behaviors represent coping mechanisms intended to help a person adapt to his/her work environment. Thinking of withdrawal behaviors as part of an adaptive process suggests two additional and important questions. First, faced with a work situation that is dissatisfying, what is the total range of adaptive behaviors from which a person may choose? Second, what are the consequences of failing to adapt?

An answer to the first question suggests a number of behaviors that fail to fit well in theories of withdrawal, but which do evidence negative associations with job affect. An obvious possibility is a proactive attempt to make changes in the work environment. Interestingly, investigation of such change attempts in relation to job attitudes has been largely limited to the filing of grievances (Dalton & Todor, 1982; Herzberg et al., 1957) and unionizing activity (e.g., Allen & Keaveny, 1981; Gettman, Goldberg & Herman, 1976; Hammer & Smith, 1978; Schriesheim, 1978). It seems likely that other forms of change attempts would show similar negative associations with affect.

It is reasonable to assume that another form of response to unsatisfying work conditions would be acts of aggression. The psychological literature (e.g., Dollard, Doob, Miller, Mowrer & Sears, 1939; Miller, 1941) provides some support for the suggestion of Spector (1978) that much organizational "aggression" (e.g., vicious gossip, refusals to cooperate, theft, sabotage, overt violence) is the result of frustration of worker's desires. Although limited, there is some evidence that dissatisfied employees are more likely to engage in sabotage and restriction of output (Bensman & Gerver, 1963; Dalton, 1970; Gouldner, 1954; Hickson, 1961; Roethlisberger & Dickson, 1939; Roy, 1952), theft (Hollinger & Clark, 1979; Sheridan, 1979), and other forms of "counterproductive" behaviors (Hollinger & Clark, 1979; Mangione & Quinn, 1975).

An answer to the second question -- regarding the consequences of failing to adapt to unsatisfactory working conditions -- has become of increasing importance in the last decade. Two categories of outcomes seem attributable to a failure to cope: accidents and illness. The first category was not addressed in this research because of methodological problems, and thus will not be discussed (see Miller and Rosse, Note 4, for a description of the literature). Although largely ignored until the 1960's, there is now substantial evidence of an association between job characteristics and employees' mental and physical health (Clarke, 1971; House, 1974a, 1974b; Kasl, 1974; Kornhauser, 1965; Margolis & Kroes, 1974; U.S. Department of HEW, 1972). Much of the research has investigated job stress -- an attitudinal response known to be correlated with job dissatisfaction (cf. House & Rizzo, 1972; Miles & Perrault, 1976; Rosse & Rosse, 1980) -- in relation to coronary heart disease

(Beehr & Newman, 1978; Friedman, Rosenman & Carroll, 1958; House, 1974a; Jenkins, 1971; Sales, 1969) or mental health (Beehr & Newman, 1978). In addition, a smaller set of researchers have found direct correlations between job dissatisfaction and heart disease (House, 1974b; Kasl, 1980), as well as physical and mental illness (McDonald & Gunderson, 1974; Roman & Trice, 1972).

Miller and Rosse (Note 4) have described an integrative conceptual framework of employee adaptation that makes testable predictions about the relations among the behaviors/outcomes previously described, and about the relations between these variables and job affect. This study was designed as an initial test of some of these predictions. A basic foundation of their model is the hypothesis that job satisfaction will demonstrate negative correlations with measures of employee withdrawal and retaliation. This study includes simultaneous measurement of a wider variety of withdrawal and aggressive behaviors than previously researched. A related hypothesis regards attempts to make constructive changes in one's job, which are expected to show curvilinear relations with affect; workers who are mildly dissatisfied should be most inclined to make changes, whereas few change attempts are expected among workers who are highly satisfied (and thus see little need for change) or highly dissatisfied (who are likely to see withdrawal as a more attractive response). Finally, dissatisfied employees who fail to either withdraw or implement changes are hypothesized to suffer from declining physical and mental health.

Method

Subjects

Seventy-two newly hired, full-time employees of a small (108 bed), non-union, secular hospital in a central Illinois town of 100,000 population were asked to participate in a study of employees' reactions to a new job. Every third eligible new hire was placed in a control group (N=24); of the 48 in the observation group, four declined to continue their participation (due to time constraints or a desire not to be involved), and two quit before sufficient data was collected to include them in analyses. The observation group subjects were young (mean age = 26.2 years), predominantly (83%) female, well educated (13.6 years of schooling), and had relatively few years of experience in their careers (mean career tenure = 2.9 years). Although multiple departments were represented, the majority of respondents were from Nursing Service (55%) and Housekeeping (25%). All three shifts were represented. The control and observation groups did not differ significantly on any demographic variables.

Measures

Affective measures included an 11-option Faces-format measure of overall satisfaction with work (Kunin, 1955), the five Job Descriptive Index scales (Smith, Kendall & Hulin, 1969), a measure of Company Identification from the Index of Organizational Reactions (Dunham & Smith, 1979), and a six-item Work Alienation scale constructed for this research. Scale means, reliabilities, estimates of temporal stability (Cronbach's Alpha using repeated measurements as items), and intercorrelations are shown in Table 1. Note that the Faces, JDI and Company

Identification scales are scored so that high values indicate more positive affect; the Alienation measure is scored in the opposite direction.

Insert Table 1 about here

Adaptive behaviors were measured in two ways. Lateness, absence and turnover information was recorded on special forms provided on a bi-weekly basis to subjects' supervisors. Frequency and time-lost (duration) measures of absence were largely redundant ($r = .94$), so only the frequency measure was retained. Annualized absence rates were relatively high (10.4 instances resulting in 17.7 days per year), whereas lateness was rare (four instances per year). Twenty of the 42 observation group subjects quit during the period of the study, resulting in a 48% turnover rate. Subjects were also asked to report intentions to quit ($M = 4.3$, $SD = 2.6$, on a 7 point unlikely-likely scale). Finally, respondents were asked to complete a 36 item measure of Avoidance behaviors, and an eight-item Attempts at Change scale. The Avoidance scale consisted of examples of withdrawal (e.g., "Daydreaming", "Taking frequent or lengthy coffee or lunch breaks") or retaliatory (e.g., "Arguing with patients or coworkers", "Purposely damaging hospital equipment or property") behaviors for which respondents were asked to report usage on a seven-point scale ranging from "Never" to "Constantly". The Attempts at Change scale consisted of similar items pertaining to making job changes (e.g., "Discussing with your superior ways to improve your job"). (For information on the construction and content of these scales see Rosse, Note 5.)

Averaging all Avoidance scale items resulted in a mean of .38, standard deviation of .35, internal consistency (Cronbach's Alpha) of .89 and an estimated temporal stability (Cronbach's Alpha using repeated measures as items) of .96. The Attempts at Change scale had a mean of 1.23, standard deviation of .66, Alpha of .57 and temporal Alpha of .94. The two scales were moderately correlated ($r = .42$, $p < .05$).

Physical and mental health were assessed by a self-report checklist of 31 somatic complaints and mood states modeled after the measure used by Guion, Veroff and Feld (1960). Respondents were asked how often they had suffered from each symptom, using a four-point scale ranging from "Almost never" to "Nearly every day". Scale scores ($M = .54$; $SD = .39$) exhibited good internal consistency ($\alpha = .86$) and stability (temporal $\alpha = .91$).

Procedure

New hires were initially contacted at the time they completed their personnel forms, before actually starting work. The general nature of the study was explained to them, with emphasis on the confidentiality of their responses and the fact that their participation was voluntary. They were told that they would be interviewed ten times over a six-month period; each interview would last about 30 minutes, and would occur during their normal work hours. (The schedule and content of the interviews is shown in Table 2.) Control group subjects were not contacted until the end of their sixth month on the job, when they received a shortened interview containing only the demographic and job attitude scales.

Insert Table 2 about here

Semi-structured interviews were used to collect most data. The increased level of rapport offered by interviews, complemented with a delayed introduction of the most sensitive questions, was felt to be crucial in obtaining honest responses. A great deal of effort was expended to convince subjects that their responses were completely confidential and that no harm would come to them as a result of the study. Informal comments suggested that this goal was generally attained for most subjects.

Results¹

It has already been noted that comparison of each group's demographic and positional indicators provided no evidence of sampling bias. A comparison of each group's affect and behavior scores likewise revealed no significant differences. This suggests that no systematic reactivity effects (e.g., a "cathartic" effect attributable to the interviewing process) should confound substantive analyses.

Correlations between job affect and job behaviors/health outcomes are shown in Table 3; all correlations are corrected for attenuation due to unreliability of both measured variables. As hypothesized, measures of withdrawal show generally negative correlations with affect. Satisfaction with work content evidences a significant correlation with absence, although none of the relations are statistically reliable for lateness or the Avoidance scale. On the other hand, intentions to quit are strongly associated with all measures of affect except satisfaction with pay. At first blush, turnover appears to be only weakly correlated with affect. Closer inspection of the correlations over time reveals an

interesting pattern: during the first ten weeks job attitudes are weakly and inconsistently related to turnover, but during the last half of the research project the relations become much stronger and in the expected directions. During this period overall work satisfaction is able to account for an impressive 45% of the variance in turnover decisions.

Self-reported health symptoms showed consistent and generally strong negative relations with affect (except for pay and promotion satisfaction). This pattern of relations persisted when initial levels of symptoms were partialled out. Thus it appears likely that negative attitudes were causing health disorders, rather than initially ill employees simply having poor attitudes.

Insert Table 3 about here

Attempts at Change exhibited strong, positive correlations with all aspects of affect except overall satisfaction. These associations were among the most impressive found, with the proportion of variance explained ranging from a minimum of 17% to a maximum of 61%. To test the hypothesis of curvilinearity, multiple regression analysis using polynomial contrasts was performed. Of the 24 individual tests possible, only three showed significant increments in R^2 attributable to the addition of a quadratic trend component. Coworker satisfaction revealed significant curvilinearity for weeks 7 and 23, but not for weeks 2 and 18; inspection of the scatterplots for the two significant effects revealed that the functions were the expected inverted-U shape. Satisfaction with supervision showed significant departures from linearity for week 14

(though not for weeks 2, 7 or 23), but in this case the shape of the function was the opposite of that hypothesized. Thus, it must be concluded that change attempts are a (positive) monotonic rather than curvilinear function of job affect.

Summarizing results to this point, job attitudes appear to be correlated with employee withdrawal (except lateness and the Avoidance scale), attempts at change, and health measures. This conclusion appears to be at odds with that of Porter and Steers (1973), who argued that absence and turnover are characterized by different patterns of correlates. To better test this prediction of non-overlapping antecedents, particularly as it applies to a broader range of variables, correlations were computed across all measures of affect for each pair of behaviors in Table 3. The resulting coefficients -- shown in Table 4 -- are a measure of the similarity of affective antecedents for each pair of variables. One should remember that the significance tests for these coefficients are based on a "sample" of only eight affective variables. Evaluation of the analysis should, therefore, be based on the magnitude and pattern of relations as well as their statistical significance.

Insert Table 4 about here

Inspection of Table 4 reveals substantial overlap in affective antecedents. Inter-correlations with the Avoidance scale, despite not always being significant, are of sufficient consistency and strength to suggest that it too probably shares common roots with the others. Only lateness shows a clear departure from strong associations. It is particularly

interesting to note that Attempts at Change inter-correlations, although strong, are in the opposite direction of those of the other variables. On the basis of these results, it appears that change attempts and withdrawal may represent fundamentally different forms of response to work.

The final hypothesis pertains to detrimental effects on health arising from a failure to adapt. A measure of health risk was devised by considering subjects' degree of dissatisfaction and their failure to engage in adaptive behaviors. Dissatisfaction was operationalized by reverse-scoring the overall satisfaction (Faces) measure and assigning a value of zero to anyone at or below the midpoint (a neutral face). Absence, lateness, Attempts at Change and Avoidance scores were dichotomized, with people scoring above the median being assigned zero and those below scored one. To compute the Risk measure the dichotomized behaviors were summed and the sum was then multiplied by the dissatisfaction score. Risk scores were computed for interviews in which all necessary variables were measured (weeks 3, 7, 10, 14, 18 and 23). Correlations between the Risk measure and the Health Symptoms scales were then computed; the average correlation for the three measurements of symptoms was a highly significant $r = .51$ (.62 corrected for attenuation). Thus, the third hypothesis was supported.

Discussion

The results just described provide support for the hypotheses drawn from Miller and Rosse's model of employee adaptation (Note 4). The preponderance of evidence supports the hypothesized association between job attitudes and employee behaviors. Averaging across all measures of affect, 25% of the variance in intentions to quit and 21% of the variance

in turnover may be explained; using the best predictors, these figures are 33% and 45%. Also noteworthy are the figures for Attempts at Change (28% average; 61% maximum) and Health Symptoms (14% and 34%, respectively).

Not all results were this strong, of course, but it must be remembered that a number of factors were operating to attenuate relations. There clearly are multiple factors underlying each of the variables, yet only job-related affect was considered in this study. Even under the best of conditions, only moderate correlations should be expected without considering the moderating and additive effects of other variables.

Moreover, this research was performed under less than ideal conditions. Both subjective impressions and limited empirical data suggest that base rates for withdrawal behaviors other than turnover may be unusually low among hospital employees. Interaction with the respondents indicated a nearly universal sense of professionalism that probably reduced the incidence of many of the behaviors. The importance of the hospital's life-saving function seemed to be pervasive; particularly for the workers with favorable labor markets, quitting may have been seen as a more "moral" response to dissatisfying work than other forms of withdrawal or retaliation that might have threatened patients' welfare. In addition, supervisors seemed to have a very casual attitude towards lateness, resulting in a probable under-estimation of lateness incidence. This had the effect of seriously attenuating correlations between lateness and affect. For all these reasons, the current data probably represent minimum levels of association.

One of the potentially most interesting aspects of this study was the inclusion of a measure of employees' attempts to change their jobs. The failure of most withdrawal researchers to consider this category of behaviors has led to a very one-sided view of employees' responses to a dissatisfying job. The results of this study suggest that attempts at change play a complementary role with withdrawal. Change attempts exhibited a pattern of affective correlates essentially opposite to that of withdrawal responses (see Table 3); whereas unhappy workers are more likely to engage in avoidance, it is the relatively more satisfied worker who is likely to attempt to implement changes in his/her job. Whether these differences in response ultimately relate to personality or to extrinsic factors (e.g., the perceived chance of successfully implementing changes) is as yet unclear, but the implications are wide ranging. Assuming that proactive adaptations are more functional than passive withdrawal, these results suggest that the costs of negative employee attitudes may be even greater than expected.

Related to this point is the issue of employee health. Although a number of prior researchers have linked health outcomes with job attitudes, an important addition here was the study of health outcomes in relation to adaptive behaviors. While workers' health was negatively associated with job dissatisfaction, it appears that this relation may be "broken" by the use of adaptive responses. It is when employees are unhappy and fail to cope that declines in health appear. This again suggests the importance of facilitating workers' attempts to effect changes in their job environment.

This research should be viewed as a preliminary step in exploring employee adaptation. The results have provided a basic empirical foundation for the adaptation concept. Future research needs to consider the process through which a person comes to exhibit a particular behavior (or opts to do nothing). A better understanding of the functional relations among behaviors is also needed. For example, are all adaptive behaviors equally adaptive? Are the behaviors substitutable? Is there a "progression of withdrawal" such that people begin with relatively mild forms and then progress to more serious behaviors, or do people choose behaviors that best match their level of satisfaction? What constraints on behavioral choices exist? This study contributes to a growing body of data that suggest that questions such as these show greater promise for understanding behavior in organizations than a continuing emphasis on individual withdrawal behaviors in isolation.

Reference Notes

1. Farrell, D. & Robb, D. Lateness to work: A study of withdrawal from work. Unpublished manuscript, Department of Management, Western Michigan University, Kalamazoo, MI, 1979.
2. Miller, H. Withdrawal behaviors among hospital employees. Unpublished doctoral dissertation, Department of Psychology, University of Illinois, Urbana, Illinois, 1981.
3. Jenkins, D. and Gupta, N. Alcohol and drug use as manifestations of employee withdrawal. Paper presented as part of the symposium "Employee Withdrawal: Issues, Problems and Perspectives" (E. E. Lawler, Chair) at the national meeting of the Academy of Management, Detroit, 1980.
4. Miller, H. and Rosse, J. A tentative model of behavioral adaptation in organizations. Unpublished manuscript, Industrial Relations Center, University of Minnesota, Minneapolis, MN, 1982.
5. Rosse, J. Development of a self-report measure of employee withdrawal tendencies. Unpublished manuscript, Industrial Relations Center, University of Minnesota, Minneapolis, MN, 1982.

References

- Adler, S., & Golan, J. Lateness as a withdrawal behavior. Journal of Applied Psychology, 1981, 66(5), 544-554.
- Allen, R., & Keaveny, T. Correlates of faculty interest in unionization: A replication and extension. Journal of Applied Psychology, 1981, 66(5), 582-588.
- Beehr, T., & Gupta, N. A note on the structure of employee withdrawal. Organizational Behavior and Human Performance, 1978, 21, 73-79.
- Beehr, T., & Newman, J. Job stress, employee health, and organizational effectiveness: A facet analysis, model and literature review. Personnel Psychology, 1978, 31, 665-699.
- Bensman, J., & Gerver, I. Crime and punishment in the factory: The function of deviancy in maintaining the social system. American Sociological Review, 1963, 28, 588-598.
- Burke, R., & Wilcox, D. Absenteeism and turnover among telephone operators. Personnel Psychology, 1972, 25, 639-648.
- Chadwick-Jones, J., Brown, C., Nicholson, N., & Sheppard, C. Absence measures: Their reliability and stability in an industrial setting. Personnel Psychology, 1971, 3, 83-96.
- Cook, R., Walizer, D., & Mace, D. Illicit drug use in the Army: A social-organizational analysis. Journal of Applied Psychology, 1976, 61, 262-272.
- Dalton, M. The interlocking of official and unofficial reward. In O. Guskys and G. Miller (Eds.), The Sociology of Organizations. New York: Free Press, 1970.

- Dalton, D., & Todor, W. Antecedents of grievance filing behavior: Attitude/behavioral consistency and the union steward. Academy of Management Journal, 1982, 25(1), 158-169.
- Dollard, J., Doob, L., Miller, N., Mowrer, O., & Sears, R. Frustration and Aggression. New Haven, CT: Yale University Press, 1939.
- Dunham, R. B., & Smith, F. S. Organizational Surveys: An Internal Assessment of Organizational Health. Glenview, IL: Scott, Foresman, 1979.
- Friedman, M., Rosenman, R., & Carroll, V. Changes in the serum cholesterol and blood clotting time in men subjected to cyclic variation of occupational stress. Circulation, 1958, 17, 852-861.
- Gettman, J., Goldberg, S., & Herman, J. Union Representation Elections: Law and Reality. New York: Russell Sage Foundation, 1976.
- Giese, W., & Ruter, H. An objective analysis of morale. Journal of Applied Psychology, 1949, 33, 421-427.
- Gouldner, A. Patterns of Industrial Bureaucracy. Glencoe, IL: Free Press, 1954.
- Gupta, N., & Jenkins, G. The Structure of Withdrawal: Relationships among Estrangement, Tardiness, Absenteeism and Turnover. Springfield, VA: National Technical Information Service, 1980.
- Gurin, G., Veroff, J., & Feld, S. Americans View Their Mental Health. New York: Arno, 1960.
- Hamner, W., & Smith, F. Work attitudes as predictors of unionization activity. Journal of Applied Psychology, 1978, 63, 415-421.
- Hawthorne, B. Job dissatisfaction: A drug-related issue. Drug Forum, 1977-1978, 6, 187-195.

- Herzberg, F., Mausner, B., Peterson, R., & Capwell, D. Job Attitudes: Review of Research and Opinion. Pittsburgh: Psychological Services of Pittsburgh, 1957.
- Hickson, D. Motives of people who restrict their output. Occupational Psychology, 1961, 35, 110-121.
- Hill, J., & Trist, E. Changes in accidents and other absences with length of service. Human Relations, 1955, 8, 121-152.
- Hollinger, R., & Clark, J. The quality of work experience: Its relationship to employee theft and production deviance. Paper presented at the Society for the Study of Social Problems Annual Meetings, Boston, August, 1979.
- House, J. Occupational stress and coronary heart disease: A review and theoretical integration. Journal of Health and Social Behavior, 1974(a), 16, 12-27.
- House, J. The effects of occupational stress on physical health. In J. O'Toole (Ed.), Work and Quality of Life. Cambridge: The MIT Press, 1974(b).
- House, R., & Rizzo, J. Role conflict and ambiguity as critical variables in a model of organizational behavior. Organizational Behavior and Human Performance, 1972, 7, 467-505.
- Ilgen, D., & Hollenback, J. The role of job satisfaction in absence behavior. Organizational Behavior and Human Performance, 1977, 19, 148-161.
- Jenkins, C. Psychologic and social precursors of coronary heart disease. New England Journal of Medicine, 1971, 284, 244-255, 307-317.

- Kasl, S. Work and mental health. In J. O'Toole (Ed.), Work and the Quality of Life. Cambridge: The MIT Press, 1974.
- Kornnauer, A. Mental Health of the Industrial Worker. New York: Wiley, 1965.
- Kunin, T. The construction of a new type of attitude measure. Personnel Psychology, 1955, 8, 65-78.
- Lyons, T. Nursing Attitudes and Turnover. Ames, Iowa: Industrial Relations Center, 1968.
- Lyons, T. Turnover and absenteeism: A review of relationships and shared correlates. Personnel Psychology, 1972, 25, 271-281.
- Mangione, T., & Quinn, R. Job satisfaction, counterproductive behavior, and drug use at work. Journal of Applied Psychology, 1975, 60(1), 114-116.
- Margolis, B., & Kroes, W. Work and the health of man. In J. O'Toole (Ed.), Work and the Quality of Life. Cambridge: The MIT Press, 1974.
- Marsh, R., & Mannari, H. Organizational commitment and turnover: A predictive study. Administrative Science Quarterly, 1977, 22, 57-75.
- McDonald, B., & Gunderson, E. Correlates of job satisfaction in naval environments. Journal of Applied Psychology, 1974, 59(3), 371-373.
- Melbin, M. Organizational practice and individual behavior: Absenteeism among psychiatric aids. American Sociological Review, 1961, 26, 14-23.
- Miles, R., & Perrault, W. Organizational role conflict: Its antecedents and consequences. Organizational Behavior and Human Performance, 1976, 17, 19-44.

- Miller, H., Katerberg, R., & Hulin, C. Evaluation of the Mobley, Horner and Hollingsworth model of employee turnover. Journal of Applied Psychology, 1979, 64, 509-517.
- Miller, N. The frustration-aggression hypotheses. Psychological Review, 1941, 48, 337-342.
- Mobley, W. Some unanswered questions in turnover and withdrawal research. Academy of Management Review, 1982, 7(1), 111-116.
- Mobley, W., Horner, S., & Hollingsworth, A. An evaluation of precursors of hospital employee turnover. Journal of Applied Psychology, 1978, 63, 408-414.
- Newman, J. Predicting absenteeism and turnover. Journal of Applied Psychology, 1974, 59, 610-615.
- Nicholson, N., Brown, C., & Chadwick-Jones, J. Absence from work and personal characteristics. Journal of Applied Psychology, 1977, 62, 319-327.
- Perone, M., DeWaard, R., & Baron, A. Satisfaction with real and simulated jobs in relation to personality variables and drug use. Journal of Applied Psychology, 1979, 64(6), 660-668.
- Porter, L., & Steers, R. Organizational, work and personal factors in employee turnover and absenteeism. Psychological Bulletin, 1973, 80, 151-176.
- Revans, R. Standards for Morale: Cause and Effect in Hospitals. London: Oxford University Press, 1964.
- Roethlisberger, F., & Dickson, W. Management and the Worker. Cambridge: Harvard University Press, 1939.

- Ronan, W. Factor analysis of eleven job performance measures. Personnel Psychology, 1963, 16, 255-268.
- Rosse, J., & Rosse, P. Role conflict and ambiguity: An empirical investigation of nursing personnel. Evaluation and the Health Professions, 1981, 4(4), 385-405.
- Roy, D. Quota restrictions and goldbricking in a machine shop. American Journal of Sociology, 1952, 57, 427-442.
- Sales, S. Organizational role as a risk factor in coronary heart disease. Administrative Science Quarterly, 1969, 14, 325-366.
- Schriesheim, C. Job satisfaction, attitudes toward unions, and voting in a union representation election. Journal of Applied Psychology, 1978, 63, 548-552.
- Sheridan, J. Is there a computer criminal working for you? Industry Week, 1979, 200, 69-76.
- Smith, P., Kendall, L., & Hulin, C. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally, 1969.
- Spector, P. Organizational frustration: A model and review of the literature. Personnel Psychology, 1978, 31, 815-829.
- Talacchi, S. Organizational size, individual attitudes, and behavior. Administrative Science Quarterly, 1960, 5, 398-420.
- Trice, H., & Roman, P. Spirits and Demons at Work: Alcohol and Other Drugs on the Job. Ithaca, NY: Cornell University, 1972.
- Urban, M. Drugs in industry. In National Commission on Marijuana and Drug Abuse, Drug Use in America, Vol. 1. Washington, DC: U.S. Government Printing Office, 1973.

U.S. Department of HEW. Work in America. Cambridge, MA: The MIT Press, 1973.

Van Zelst, R., & Kerr, W. Workers' attitudes toward merit rating.

Personnel Psychology, 1953, 6, 159-172.

Waters, L., & Roach, D. Job attitudes as predictors of termination and absenteeism: Consistency over time and across organizational units.

Journal of Applied Psychology, 1973, 57, 341-342.

Waters, L., & Roach, D. Job satisfaction, behavioral intention and

absenteeism as predictors of turnover. Personnel Psychology, 1979,

32, 393-397.

Waters, L., & Roach, D. Relationships between job attitudes and two

forms of withdrawal from the work situation. Journal of Applied

Psychology, 1971, 55, 92-94.

Footnotes

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¹Due to multiple measurements of variables, results are generally reported in terms of mean or median correlations (after Fisher's r to z transformation). Because degrees of freedom fluctuated due to attrition of subjects, the conservative strategy of using the df associated with the smallest sample in the average was adopted; for most analyses this meant that the sample size at the time of the last interview ($N=25$) was used for significance tests. The lack of statistical power attributable to the small sample prompted the use of an alpha level of .10, rather than the conventional .05. Although this increases the risk of Type I error, it also substantially improves the probability of detecting true effects. In the author's view, this tradeoff is acceptable, especially given the semi-exploratory nature of this research. Of course, this decision magnifies the importance of replicating results. Significance tests are based on raw, uncorrected correlations.

TABLE 1

Characteristics of Affect Scales

	<u>Faces</u>	<u>Work</u>	<u>JDI Facets</u>		<u>Promotion</u>	<u>Pay</u>	<u>Company Identification</u>	<u>Alienation</u>
Number of Items	1	18	Supervisor	Coworker				
			18	18	9	9	5	5
Range	1-11	0-54	0-54	0-54	0-27	0-27	1-5	0-4
Mean	8.1	32.0	42.7	44.3	10.3	13.6	3.3	1.8
SD	2.2	11.6	9.2	11.4	7.0	7.2	.6	.6
Test-Retest α	.87	.94	.82	.93	.79	.82	.88	.87
Number of Measurements	9	5	4	4	2	2	3	3
Faces	n/a							
JDI-Work	.44	(.81)						
JDI-Sup.	.31	.44	(.79)					
JDI-Cow.	.42	.59	.35	(.89)				
JDI-Prom.	.34	.23	.36	.26	(.78)			
JDI-Pay	.05	.40	.14	.20	.40	(.79)		
Company Identification	.50	.61	.48	.45	.56	.56	(.77)	
Alienation	-.49	-.62	-.63	-.56	-.48	-.36	-.54	(.69)

Notes: Mean, SD and α (in parentheses) are averaged over all measurements in six month period; correlations are mean concurrent correlations.

Test-retest α treats measurements as items and measures consistency of scale scores over applicable number of measurements.

Based on follow-up group only; Ns range from 25 to 42 depending on attrition; $r \geq .26$, $p < .10$.

TABLE 2
Content and schedule of focal interviews

	<u>Week</u>									
	0	1	2	3	5	7	10	14	18	23
ATTITUDINAL										
"Faces"	x	x	x	x	x	x	x	x	x	x
JDI-Work		x			x		x		x	x
JDI-Supervision			x			x		x		x
JDI-Coworkers			x			x		x		x
JDI-Pay							x			x
JDI-Promotions							x			x
Company Identification					x			x		x
Alienation					x			x		x
WITHDRAWAL										
Self-report behaviors				x		x	x	x	x	x
Intention to quit	x		x			x		x		x
Absence and lateness ^a		x	x	x	x	x	x	x	x	x
MISCELLANEOUS										
Health history	x									x
Demographics	x									

28

Adaptation to Work

33

TABLE 3
Disattenuated Affect-Outcome Correlation Matrix

	Faces	Work	JDI FACETS		Prom.	Pay	Company Identification	Alienation
			Sup.	Cow.				
Avoidance	-.16	.00	-.19	.02	-.10	.13	-.31	.16
Absence Frequency	-.20	-.40	-.04	-.27	-.06	.02	-.12	.23
Lateness	.01	-.21	.10	.08	-.22	-.12	.02	-.06
Turnover								
-Total	.01	-.12	-.29	-.21	-.30	-.38	.15	.19
-Late	-.67	-.64	-.49	-.40	n/a	n/a	-.20	.37
Intention to Quit	-.43	-.57	-.41	-.52	-.38	-.13	-.47	.42
Health Symptoms	-.58	-.43	-.32	-.49	-.19	.00	-.32	.33
Attempts at Change	.14	.58	.52	.46	.41	.54	.59	-.78

Notes: All correlations are means averaged over all applicable measurements.

Ns range from 25 to 42, depending on attrition.

Underlined coefficients indicate that raw, uncorrected correlation is significant, $p < .10$.

Correlations with turnover are averaged across all measurements ("Total") and also for just the last 13 weeks of the research ("Late").

TABLE 4
Similarity Matrix of Correlates of Behaviors

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
1. Absence Frequency						
2. Lateness	.05					
3. Avoidance	.32	-.36				
4. Attempts at Change	-. <u>.66</u>	-.01	-.48			
5. Health Symptoms	. <u>.88</u>	-.28	. <u>.60</u>	-. <u>.66</u>		
6. Intention to Quit	. <u>.88</u>	-.10	. <u>.63</u>	-. <u>.87</u>	. <u>.93</u>	
7. Turnover	. <u>.80</u>	-.01	.38	-. <u>.76</u>	. <u>.86</u>	. <u>.85</u>

Note: Underlined coefficients are significant, $p < .10$ ($N = 8$).